

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

IPLEARN, LLC,
Plaintiff,

v.

K12 INC.,
Defendant.

Civil Action No. 11-1026-RGA

Memorandum Opinion

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December 17, 2014


ANDREWS, UNITED STATES DISTRICT JUDGE:

Before the Court is Defendant K12's Motion for Summary Judgment of Invalidity, Non-Infringement, and No Pre-Suit Damages. (D.I. 173). The motion is fully briefed (D.I. 174, 217, 239)¹ and oral argument was heard on October 28, 2014.² For the reasons set forth herein, the Defendant's Motion for Summary Judgment is granted with respect to the patent claims' invalidity under 35 U.S.C. § 101. The patent does not claim patent-eligible subject matter.³

I. Background

¹ Both parties, since the October 28, 2014 oral argument, have filed a number of Notices of Supplemental Authority, as well as Responses (*see, e.g.*, D.I. 274, 276, 277, 278, 283, 284). The Court appreciates the parties' attorneys' diligence and zealous advocacy for their respective positions. It is clear that a number of district courts are grappling with section 101 issues after *Alice Corp. v. CLS Bank International*, 134 S. Ct. 2347 (2014). With the exception of *Ultramercial, Inc. v. Hulu, LLC*, 2014 WL 5904902 (Fed. Cir. Nov. 14, 2014), however, the Court found most of this additional authority not entirely relevant or on-point.

Plaintiff, for example, points to *DDR Holdings, LLC v. Hotels.com, L.P.*, 2014 WL 6845152 (Fed. Cir. Dec. 5, 2014). Plaintiff itself notes, however, that the claims in that case recite a way to solve a problem on the Internet. (*See* D.I. 283 at 2); *DDR Holdings*, 2014 WL 6845152, at *12 ("It is also clear that the claims at issue do not attempt to preempt every application of the [allegedly abstract idea]. Rather, they recite a specific way to ... to solve a problem faced by websites on the Internet."). The claims at issue in this matter are not nearly so limited. Or, as the Federal Circuit further explained in *DDR Holdings*, the claims "stand apart because they do not merely recite the performance of some business practice known from the pre-Internet world along with the requirement to perform it on the Internet" but instead claim a solution to a "problem specifically arising in the realm of computer networks." *Id.* at *10. The current claims recite pre-Internet and pre-computer educational practices performed with computers and the Internet. The claims at issue do not solve a problem arising only in the realm of computers, networks, or the Internet. Therefore, the Court finds the current claims notably different from those in *DDR Holdings*. (*See also infra* Part III).

² At oral argument, both parties argued other motions too. They will be addressed, if necessary, separately.

³ Defendant in its Motion for Summary Judgment raises other issues related to non-infringement, indefiniteness, and pre-suit damages. (D.I. 173). They will be addressed, if necessary, separately.

IpLearn, LLC filed a patent infringement action against K12, Inc. on October 26, 2011.

(D.I. 1). IpLearn maintains that K12 directly infringes five claims of the 6,688,888 (“the ‘888 patent”)—two independent claims 9 and 35, and three dependent claims 10, 19 and 20. (D.I. 182 at p. 4). The ‘888 patent is related to a computer-aided learning system, described in its abstract as follows:

A computer-aided learning method and apparatus based on a super-recommendation generator, which is configured to assess a user’s or a student’s understanding in a subject, reward the user who has reached one or more milestones in the subject, further the user’s understanding in the subject through relationship learning, reinforce the user’s understanding in the subject through reviews, and restrict the user from enjoying entertainment materials under certain condition, with the entertainment materials requiring a device to fulfill its entertainment purpose. The generator does not have to be configured to perform all of the above functions.

(‘888 patent, Abstract).⁴

Claim 9 of the ‘888 patent recites:

A computer-implemented learning method regarding learning a subject, which is separated into a plurality of areas, the method comprising:

- accessing a learner’s results on a test;
- analyzing the learner’s test results, using one or more rules, to determine
 - at least one weakness in the learner’s understanding on the subject; and
- providing guidance to the learner to target the at least one weakness;
- wherein
 - the analysis is performed by a first computing device;
 - a report, based on the analysis and a report format,
 - regarding the learner’s understanding in at least two
 - areas of the subject, is allowed to be presented by a
 - second computing device, which is coupled, through a network, to the first
 - computing device;
 - the method considers at least a preference of the learner,
 - other than the fact that the learner might prefer to learn the subject;
 - at least a plurality of areas of the subject can be
 - individually accessed via the Internet;
 - an identifier, which can be entered by the learner and
 - which is associated with the learner, is stored and can
 - be accessed by a computing device;

⁴ The “entertainment” materials are not claimed in the asserted claims.

an identifier, which can be entered by a person
interested in the learner's understanding in the subject and which is
associated with the person, is stored and can be accessed by a computing
device;
at least some materials on the learner's understanding in the subject is stored in a
storage area that has materials regarding the learner;
the method allows the person to search for at least some
of the materials in the storage area; and
the method allows the learner to search the storage area
for at least some of the materials related to the
learner, regarding the subject.

(*Id.* at claim 9).

Dependent claim 10 reads:

A method as recited in claim 9 further comprising generating materials for learning the
subject.

(*Id.* at claim 10).

Dependent claim 19 reads:

A method as recited in claim 9 wherein the test can be administered before teaching the
learner the subject so as to determine the learner's understanding regarding the subject.

(*Id.* at claim 19).

Dependent claim 20 reads:

A method as recited in claim 9 wherein the method allows the learner to search the
storage area for at least some of the materials on the learner's weakness in the subject.

(*Id.* at claim 20).

Claim 35 of the '888 patent, the other independent claim at issue, states:

A computer readable medium including at least computer program code for learning a subject,
which is separated into a plurality of areas, said computer readable medium comprising:

computer program code for accessing a learner's results on a test;
computer program code for analyzing the learner's test results,
using one or more rules, to determine at least one
weakness in the learner's understanding on the subject;
computer program code for providing guidance to the learner
to target the at least one weakness;
computer program code for allowing a computing device

coupled through a network to present a report, based on the analysis and a report format, regarding the learner's understanding in at least two areas of the subject;
computer program code for considering at least a preference of the learner, other than the fact that the learner might prefer to learn the subject; and
computer program code for storing at least some materials on the learner's understanding in the subject in a storage area that has materials regarding the learner;
wherein
at least a plurality of areas of the subject can be individually accessed via the Internet;
an identifier, which can be entered by the learner and which is associated with the learner, is stored and can be accessed by a computing device;
an identifier, which can be entered by a person interested in the learner's understanding in the subject and which is associated with the person, is stored and can be accessed by a computing device;
the person can search for at least some of the materials in the storage area using computer program code for searching; and
the learner can search, using computer program code for searching, the storage area for at least some of the materials related to the learner, regarding the subject.

(*Id.* at claim 35).⁵

Defendant maintains that the patent does not claim patent-eligible subject matter under 35 U.S.C. § 101.

II. Legal Standard

A. Summary Judgment

“The court shall grant summary judgment if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” FED. R. CIV. P. 56(a). The moving party has the initial burden of proving the absence of a genuinely disputed material fact relative to the claims in question. *Celotex Corp. v. Catrett*, 477 U.S. 317, 330 (1986). Material facts are those “that could affect the outcome” of the proceeding, and “a

⁵ The Court earlier construed various terms in the ‘888 patent (D.I. 117), but none of those constructions is relevant to the § 101 issue.

dispute about a material fact is ‘genuine’ if the evidence is sufficient to permit a reasonable jury to return a verdict for the nonmoving party.” *Lamont v. New Jersey*, 637 F.3d 177, 181 (3d Cir. 2011) (quoting *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986)). The burden on the moving party may be discharged by pointing out to the district court that there is an absence of evidence supporting the non-moving party’s case. *Celotex*, 477 U.S. at 323.

The burden then shifts to the non-movant to demonstrate the existence of a genuine issue for trial. *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 586–87 (1986); *Williams v. Borough of West Chester, Pa.*, 891 F.2d 458, 460–61 (3d Cir. 1989). A non-moving party asserting that a fact is genuinely disputed must support such an assertion by: “(A) citing to particular parts of materials in the record, including depositions, documents, electronically stored information, affidavits or declarations, stipulations . . . , admissions, interrogatory answers, or other materials; or (B) showing that the materials cited [by the opposing party] do not establish the absence . . . of a genuine dispute” FED. R. CIV. P. 56(c)(1).

When determining whether a genuine issue of material fact exists, the court must view the evidence in the light most favorable to the non-moving party and draw all reasonable inferences in that party’s favor. *Scott v. Harris*, 550 U.S. 372, 380 (2007); *Wishkin v. Potter*, 476 F.3d 180, 184 (3d Cir. 2007). A dispute is “genuine” only if the evidence is such that a reasonable jury could return a verdict for the non-moving party. *Anderson*, 477 U.S. at 247–49. If the non-moving party fails to make a sufficient showing on an essential element of its case with respect to which it has the burden of proof, the moving party is entitled to judgment as a matter of law. *See Celotex Corp.*, 477 U.S. at 322.

B. Patent-Eligible Subject Matter

“Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” 35 U.S.C. § 101. Section 101 contains an implicit exception for three categories of subject matter not eligible for patentability: laws of nature, natural phenomena, and abstract ideas. *Ultramercial, Inc. v. Hulu, LLC*, 2014 WL 5904902, at *3 (Fed. Cir. Nov. 14, 2014) (citations omitted) (internal quotation marks omitted). These three categories are barred from patentability to protect the “basic tools of scientific and technological work” out of concern that “patent law not inhibit further discovery by improperly tying up the future use of these building blocks of human ingenuity.” *Alice Corp. v. CLS Bank International*, 134 S. Ct. 2347, 2354 (2014) (citations omitted) (internal quotation marks omitted). Because at some level all inventions rely on laws of nature, natural phenomena, or abstract ideas, an invention is not ineligible for patentability merely because it involves an abstract idea. *Id.* “[T]o transform an unpatentable law of nature into a patent-eligible application of such a law, one must do more than simply state the law of nature while adding the words ‘apply it.’” *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1294, (2012) (citations omitted) (emphasis omitted).

The Federal Circuit in *Ultramercial* recently applied the Supreme Court’s *Alice Corp.* framework for patent-eligible subject matter. A court must first determine whether the claims at issue are directed at one of the three patent-ineligible categories of subject matter. *Ultramercial, Inc.*, 2014 WL 5904902, at *3. If the answer is yes, a court must then determine “whether the claims contain an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the ineligible concept itself.” *Id.* (internal quotation marks omitted) (citations omitted). For this second step, the claims must

contain an “inventive concept to transform” the abstract idea into patentable subject matter. *Id.* at *5. “[T]he mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention. Stating an abstract idea while adding the words ‘apply it’ is not enough for patent eligibility.” *Alice Corp.*, 134 S. Ct. at 2358 (citations omitted) (internal quotation marks omitted). For this second step, the machine-or-transformation test can be a “useful clue,” although it is not determinative. *Ultramercial, Inc.*, 2014 WL 5904902, at *6.

“Whether a claim is valid in light of § 101 is a question of law,” which the Federal Circuit reviews *de novo*, without deference. *In re Nuijten*, 500 F.3d 1346, 1352 (Fed. Cir. 2007); *see also Ultramercial, Inc.*, 2014 WL 5904902, at *3.⁶

III. Discussion

Defendant argues that claim 9 of the ‘888 patent seeks to “preempt the abstract concept of analyzing a learner’s test results and providing guidance to the learner based on that analysis.” (D.I. 174 at p. 8). According to Defendant, the claims are “basic concepts” that “form the building blocks of societal education and have been employed by teachers and tutors since Socrates taught Plato.” (*Id.* at pp. 8-9). Defendant argues that the dependent claims 10, 19, and 20 are also invalid under § 101. (*Id.* at pp. 18-19). Similarly, Defendant argues that claim 35,

⁶ In a recent concurrence, Judge Mayer wrote that section 101 eligibility is a “threshold question,” “the primal inquiry, one that must be addressed at the outset of litigation,” explaining that the determination “bears some of the hallmarks of a jurisdictional inquiry.” *Ultramercial, Inc.*, WL 5904902, at *7 (Mayer, J., concurring). The Court is not certain whether Judge Mayer’s opinion is a correct statement of the law for all cases but believes it is instructive in this case. IpLearn has asserted that K12 must provide evidence to support the contention that the claims at issue are abstract ideas. (D.I. 217 at 8). Because section 101 determinations are questions of law, and a threshold inquiry, and because every judge and lawyer has firsthand experience with instructional methods, this Court does not believe it necessary that K12 proffer evidence that the type of instruction and testing outlined in the claims is time-honored.

which tracks the language of claim 9, is also patent-ineligible for the same reason. (*Id.* at p. 19). Plaintiff responds that claim 9 is “neither an abstract idea nor mere instructions to apply an abstract idea.” (D.I. 217 at 14). Plaintiff also disputes that the difference between claim 35 and claim 9 is merely about terminology because claim 35 provides an embodiment of using “computer program code.” (*Id.* at 25).

The novelty of the invention is the use of computers. In the Background of the Invention, the inventors state:

The present invention relates generally to learning and more particularly to using a computer to enhance learning. ... However, *for decades*, the way to test a student has remained *the same*; learning has been treated *typically* as a reward in itself; a fixed syllabus *usually* controls the educational process of a subject without taking into account students’ individual progress; what students have learnt are *rarely* selectively reviewed; and typically, the students can access non-educational materials when they should be using computers to learn. It should be obvious that we need methods and systems that are *based on computers* to remedy the above deficiencies.

(‘888 patent, 1:35-54) (emphasis added).

Three things are noteworthy about this passage. First, the educational practices were described as being “decades” old. Second, the educational testing practices that the inventors considered to be desirable were all well-known, as evidenced by the inventors’ description of the undesirable practices as being “typical” and “usual.” Implicit in the inventors’ recitation is that the better practices were known, but rarely used. Third, the solution is described as “[add] computers.”

Claims 9 and 35 are essentially the same invention, differing materially only in that claim 9 is a method claim and claim 35 is an apparatus claim of a “computer readable medium” including “computer program code” to perform nearly every step in claim 9.⁷ Plaintiff does not

⁷ Claim 35 contains an analog of every meaningful step of claim 9’s method except for a step allowing certain subjects to be individually accessed via the Internet.

appear to clarify how the difference between the two claims is more than terminology—or meaningful. (D.I. 217 at 25). The only difference between the claims is the use of “computer readable medium” including “computer program code” to perform the steps. Similarly, claims 10, 19 and 20 merely take claim 9’s method and use it to generate “material for learning the subject,” to allow a diagnostic test to be performed to assess the learner’s understanding of material, and to allow a learner to search the storage area for material on the learner’s weakness in the subject.

The full text of claims 9 and 35 are above, but Plaintiff has broken down the nine steps of claim 9 in a way that seems appropriate and representative to the Court:

- (a) a computer that accesses a learner’s test results on a test,
- (b) a computer that analyzes the learner’s test results using rules to determine a weakness in the learner’s understanding,
- (c) a computer that provides guidance to the learner to target the weakness,
- (d) a report based on the analysis and a report format, regarding the learner’s understanding in at least two areas of a subject, that is allowed to be presented by another computer connected through a network to the computer that performed the analysis,
- (e) considering certain preferences of the learner,
- (f) allowing access to individual areas of a subject over the Internet,⁸
- (g) identifiers that are associated with and can be entered by learners and those interested in the learners, and that are stored and can be accessed by a computer,
- (h) storing materials on a learner’s understanding in a storage area that has materials regarding a learner, and
- (i) allowing the search of materials in a storage area.

(D.I. 217 at 7).

1. Abstract Idea

Plaintiff does not concede that claim 9 and claim 35, as well as the dependent claims, are directed to an abstract idea, related to educational instruction and enhancing that instruction with

⁸ Step (f) does not appear to have an analog in claim 35.

a computer. At oral argument, Plaintiff argued in part that because claim 9 did not “preempt a fundamental building block of scientific and technological work,” it was not an abstract idea (D.I. 282 at 53). The Court disagrees.

These claims follow several steps directed at the abstract idea of instruction, evaluation, and review. More specifically, the steps are an abstraction, addressed to fundamental human behavior related to instruction, which is apparent when the steps are summarized without their generic references to computers and networks: 1) accessing a learner’s test results, 2) analyzing those test results, 3) providing guidance on weaknesses, 4) generating a report on two or more subjects to be shared with others, 5) considering the learner’s preferences, 6) allowing access to areas of a subject on the Internet, 7) providing an identifier for a learner, 8) storing the learner’s materials, and 9) allowing a search of those materials. None of these steps taken individually, or taken collectively, is sufficiently concrete. As a whole, they represent an abstract idea of conventional everyday teaching that happens in schools across the country. While there are limitations, they do not save the claims from being directed at an abstract idea.

Claim 9 starts by highlighting “[a] computer-implemented learning method regarding learning a subject, which is separated into a plurality of areas, the method comprising...” (‘888 Patent, Claim 9). Similarly, the ‘888 patent’s Background section begins, “[t]he present invention relates generally to learning and more particularly to using a computer to enhance learning.” (‘888 Patent, Background). Such subject matter seems precisely the building blocks of ingenuity the Supreme Court in *Alice Corp.* was so concerned about inhibiting. 134 S. Ct. 2354. Instructing students, evaluating those students, and providing methods to review their progress are concepts that have probably existed as long as there has been formal education. Whether or not the method outlined in the patent is sufficiently transformative of the abstract

idea to make it patent eligible is the second-part of the inquiry. But, in my opinion, it is beyond dispute that the claims are directed to an abstract idea—instruction, evaluation, and review.

2. Transformation

Claims 9 and 35, as well as the dependent claims, are directed at an abstract idea. The second part of the Section 101 analysis requires determining whether the claims contain an “inventive concept to transform” the abstract idea into patentable subject matter. *See Ultramercial*, 2014 WL 5904902, at *5. Plaintiff argues that claim 9 discloses a “very specific, and narrow” method, that it is “narrowly tailored and, at the relevant time, claimed a new type of computer-implemented learning.” (D.I. 217 at 20). A new idea, *i.e.*, one that is non-anticipated and non-obvious, does not, however, make an abstract idea patent eligible. *See Ultramercial, Inc*, 2014 WL 5904902, at *4 (“We do not agree with Ultramercial that the addition of merely novel or non-routine components to the claimed idea necessarily turns an abstraction into something concrete.”). Likewise, Plaintiff also argues that claim 35 can be distinguished from an abstract idea. At oral argument, Plaintiff argued that the “combination of elements” of claim 9, not each element discretely, together make the claim eligible subject matter. (D.I. 282 at 52).

While Plaintiff is correct that claims 9 and 35 contain limitations, none are sufficient to ensure that the claims amount to “significantly more” than patenting the abstract idea of instruction, evaluation, and review. Nor do they possess inventive concepts to transform the abstract idea. *See Ultramercial*, 2014 WL 5904902, at *3. Similarly, dependent claims 10, 19 and 20 do not add meaningful limitations to claim 9. Generating learning materials, allowing diagnostic testing, and allowing a learner to search an area for material on the learner’s weaknesses are not meaningful limitations. *See id.*

A familiar hypothetical, which walks through steps of the claims, may be instructive. An elementary student is taught multiplication tables. She takes a test, and her results are graded (or “accessed”) by her teacher. The teacher analyzes the student’s test results against a grading rubric to determine the student’s weaknesses. The teacher provides guidance to the student about her weaknesses. The teacher puts together a progress report on the student’s multiplication tables, highlighting the student’s most recent test, perhaps identifying weaknesses with multiples of 6 and 11. This progress report is shared with others, perhaps in a parent-teacher conference. The teacher takes into consideration the student’s preference for math games over timed pop quizzes. The student is allowed to access flash cards (“materials”) on her weak multiples, which are kept in a file cabinet in her classroom. Using the student’s first and last name as an identifier, the teacher stores the student’s materials in a file. Her parents can also request to see her file by telling the teacher her name. This is the kind of hypothetical that could happen every day in elementary schools in this country.⁹ Allowing the claims at issue would simply inhibit fundamental educational instruction and the building blocks of human ingenuity. *See Alice Corp.*, 134 S. Ct. at 2354.

The fact that computers, networks, the Internet, computer readable medium, or computer program code figure into claims 9, 35, and the dependent claims, does not save them. As the Supreme Court has said, merely reciting a “generic computer” in claims is not enough for eligibility. *Alice Corp.*, 134 S. Ct. at 2358.¹⁰ With the abstract idea of instruction, evaluation and

⁹ A similar analysis could be performed using a piano teacher, a chess tutor, or other sorts of individual teachers or coaches.

¹⁰ That claim 35 essentially only differs from claim 9 in using “computer program code” and a “computer readable medium” suggests that to allow these claims would reward clever drafting, something the Supreme Court has cautioned against. “Given the ubiquity of computers wholly generic computer implementation is not generally the sort of additional feature that provides any practical assurance that the process is more than a drafting effort designed to monopolize the

review, claims 9 and 35's uses of computers, networks, the Internet, or computer program code are generic. As a thought experiment, if these generic terms are excised, the claims preempt the most fundamental aspects of educational instruction with teachers and testing. *See Ultramercial*, 2014 WL 5904902, at *6 ("[The Internet] is a ubiquitous information-transmitting medium, not a novel machine. And adding a computer to otherwise conventional steps does not make an invention patent-eligible. Any transformation from the use of computers or the transfer of content between computers is merely what computers do and does not change the analysis." (citations omitted)). To better understand this point, these terms could easily be replaced, respectively, by teachers, conferences, file cabinets, or instructors, for example. "To salvage an otherwise patent-ineligible process, a computer must be integral to the claimed invention, facilitating the process in a way that a person making calculations or computations could not." *Bancorp Servs., L.L.C. v. Sun Life Assur. Co. of Canada (U.S.)*, 687 F.3d 1266, 1278 (Fed. Cir. 2012). If the same steps could be performed by instructors, a computer is not integral. Merely because calculations are more efficient on a computer is not enough. *Id.* As the above hypothetical demonstrates, the use of computers, networks or the Internet is not required to perform the steps of the claims. These generic computers, networks and Internet do not add any meaningful transformations to the claims.

abstract idea itself." *Alice Corp.*, 134 S. Ct. at 2358 (citations omitted) (internal quotation marks omitted). It seems apparent in this case that the "computer readable medium" and "computer program code" are simply a claim on the computer code necessary to implement the computer-implemented method claims. Since the computer code is not actually described or claimed, it presumably would have been a routine matter for a person of ordinary skill in the art to write the computer code necessary to implement the method.

Claims 9, 35, and dependent claims 10, 19, 20, are directed toward an unpatentable abstract idea, and they have not been sufficiently transformed to save them. Therefore these claims are invalid under 35 U.S.C. § 101.

IV. Conclusion

For the reasons stated above, the Defendant's Motion for Summary Judgment is granted with respect to the patent claims' invalidity under 35 U.S.C. § 101 as patent-ineligible subject matter.

A separate order will be issued.